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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,356	08/08/2005	Milo Sebastian Peter Shaffer	082077-0314577	9306

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EXAMINER	
VETERE, ROBERT A	

ART UNIT	PAPER NUMBER
1712	

NOTIFICATION DATE	DELIVERY MODE
11/08/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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DETAILED ACTION

Examiner's Comments

An after-final response, presenting arguments, was received and entered on 9/30/10.

Response to Arguments

1. Applicant's arguments filed 9/30/10 have been fully considered but they are not persuasive.

Applicant first argues that Weidenkaff fails to cure the deficiency of Resasco '016 teaching the use of hydrogen. This is not persuasive. While Resasco '016 teaches that the precursors are heated in a hydrogen environment, it teaches this step with respect to forming a cobalt catalyst from bis(cyclopentadienyl) cobalt. Weidenkaff, on the other hand, teaches that when forming a cobalt catalyst from cobalt oxalate, decomposition occurs in air (i.e. a non-reducing environment).

Applicant further argues this point by asserting that Weidenkaff is only directed to the formation of multi-walled nanotubes ("MWNT") and, therefore, cannot be combined with Resasco which is directed to single-walled nanotubes ("SWNT"). This is not persuasive. While the examiner agrees that Weidenkaff is directed to the formation of MWNT, Resasco explains that either cobalt or nickel precursors can be used to form SWNT and that the carbon-containing gas is what determines whether SWNT or MWNT are formed (5:50-6:6).

Applicant also argues that Resasco only teaches the formation of MWNT using an arc discharge system. This is not persuasive. Resasco teaches that the same process can be used to form either SWNT or MWNT while only adjusting the type of carbon-containing gas that is used (5:50-6:6).

Applicant next argues that, while elution is one of many methods known in the art of collecting nanotubes, there is no motivation to combine the teaching of elution in Kawakami with the method of Resasco. This is not persuasive. A claimed invention is likely to be obvious if it is a combination of known prior art elements that would reasonably have been expected to maintain their respective properties or functions after they have been combined. One of ordinary skill in the art would have understood that, because elution is a well known means of collecting nanoparticles, there is a predictable expectation of successfully collecting the nanotubes by elution.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT VETERE whose telephone number is (571)270-1864. The examiner can normally be reached on Mon-Fri 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Vetere/
Examiner, Art Unit 1712

/David Turocy/
Primary Examiner, Art Unit 1715